

10/572,419

1-48. (CANCELED)

49. (NEW) A method for automatically inserting small items, to be transmitted via a mailing service, into envelopes via a device comprising a storage bin for storage envelopes and a means for successively feeding individual envelopes, a means for moving documents or objects to be transmitted toward said individual envelopes comprising a folded closing flap, and a means for introducing one of these documents or one of these objects into one of said envelopes, said method comprising the steps of:

storing the envelopes such that the flap of each individual envelope is located on the bottom of the envelope and towards a front in the direction of removal,

unfolding said flap downwards in the direction of the envelope opening by generating at least one stream of air and by a rotary cam,

moving said envelope flap into contact with an exterior surface of a cylindrical control drum,

placing said envelope flap against said exterior surface of the control drum by radial suction produced inside said cylindrical control drum,

individually and successively displacing each envelope by pulling its flap placed against the exterior surface of said control drum towards a zone for introduction of one of said documents or one of said objects,

detaching the envelopes from the control drum by at least one scraper that is tangential in relation to the exterior surface of said drum,

opening the envelope, and

introducing said document or said object into said previously opened envelope.

50. (NEW) A method according to claim 49 further comprising the step of opening each envelope by opening guides which are inserted into the envelope.

51. (NEW) A method according to claim 50 further comprising the step of compressing said enveloped laterally during the insertion of the opening guides.

52. (NEW) The device (10, 50) for implementing the method of automatically inserting small items into envelopes to be transmitted by a mailing service, said device comprising an envelopes storage means (12, 52) and a means for successively feeding individual envelopes (15), a means for feeding the documents or objects to be

11/29/2007 2:43 PM

- 2 -

10/572,419

transmitted toward said individual envelopes which include a folded closing flap, and a means for introducing one of these documents or one of these objects inside one of said envelopes,

wherein said means of feeding the individual envelopes comprises at least one rotary cam (14, 54) which engages below the flap of each individual envelope in order to unfold it, at least one organ (23, 63) generating at least one stream of air (24, 64) to assist with unfolding the flap of each individual envelope in order to open it, a rotating control drum (13, 53) having an exterior surface which displaces the envelopes (15) individually and successively from said storage means (12, 52) towards a zone for introducing one of said documents or one of said objects into one of said individual envelopes, said control drum (13, 53) comprises at least one peripheral zone (17, 57) perforated with openings (20, 60) and in that said openings are connected to a suction device in an intermediate zone between said storage means and the zone for introduction of one of said documents into one of said individual envelopes and said openings (20, 60) are connected to a pressurized air generating device in said zone for introduction of one of said documents into one of said individual envelopes, and at least one scraper (25, 65) for detaching said individual envelope from said control drum (13, 53) in said introduction zone.

53. (NEW) The device according to claim 52, wherein said control drum (13, 53) comprises on at least a portion of its periphery a covering (17, 57) with a high coefficient of friction.

54. (NEW) The device according to claim 53, wherein said peripheral covering (17, 57) on said control drum (13, 53) extends over an angular section comprising between 25% and 75% of the periphery.

55. (NEW) The device according to claim 53, wherein said peripheral covering (17, 57) on said control drum comprises several parallel bands (18, 58) extending over an angular section comprising at least between 25% to 75% of the periphery.

56. (NEW) The device according to claim 52, wherein said rotary cam (14, 54) is driven synchronously with said control drum.

11/29/07 4:20 PM

- 3 -

10/572,419

57. (NEW) The device according to claim 52, wherein said rotary cam (14, 54) is provided with at least one projection (22, 62) for initiating the unfolding of the flap of each individual envelope.

58. (NEW) The device according to claim 52, wherein the control drum (13, 53) and the rotary cam (14, 54) are the same diameter and are driven synchronously at the same speed and in that along one portion of their circular trajectory, said rotary cam (14, 54) is in contact with the peripheral surface of said control drum (23, 53) to drive one envelope from said storage means (12, 52) towards said introduction zone.

59. (NEW) The device according to claim 52, wherein the device comprises several scrapers (25, 65) arranged in parallel, said scrapers being located between the parallel bands (18, 58) of said peripheral covering (17, 67) on said control drum.

60. (NEW) The device according to claim 52, wherein the device comprises lateral deflectors (36) to push together the lateral edges of said individual envelopes and assist in opening them.

61. (NEW) The device according to claim 60, wherein said lateral deflectors (36) comprise guide rollers.

62. (NEW) The device according to claim 60, wherein said lateral deflectors (36) comprise guide profiles.

63. (NEW) The device according to claim 52, wherein said control drum (53) comprises at least two cylindrical segments (80) separated by at least one unattached ring (81).

64. (NEW) The device according to claim 63, wherein said unattached ring (81) is formed of a roller.

11/29/07 3:58 pm

- 4 -